



EP 0 228 458 B2 (11)

(12)

## **NEW EUROPEAN PATENT SPECIFICATION**

- (45) Date of publication and mention of the opposition decision: 22.10.1997 Bulletin 1997/43
- (45) Mention of the grant of the patent: 02.10.1991 Bulletin 1991/40
- (21) Application number: 86904590.6
- (22) Date of filing: 30.06.1986

- (51) Int Cl.<sup>6</sup>: C12N 15/00, C12N 5/00, A61K 47/00, A61K 35/12, A61K 38/08, A61K 38/43, A61F 2/10
- (86) International application number: PCT/US86/01378
- (87) International publication number: WO 87/00201 (15.01.1987 Gazette 1987/01)
- (54) EPITHELIAL CELLS EXPRESSING FOREIGN GENETIC MATERIAL EXPRESSION VON FREMDEM GENETISCHEM MATERIAL IN EPITHELZELLEN CELLULES EPITHELIALES EXPRIMANT UN MATERIAU GENETIQUE ETRANGER
- (84) Designated Contracting States: AT BE CH DE FR GB IT LI LU NL SE
- (30) Priority: 05.07.1985 US 752466
- (43) Date of publication of application: 15.07.1987 Bulletin 1987/29
- (73) Proprietor: WHITEHEAD INSTITUTE FOR **BIOMEDICAL RESEARCH** Cambridge, MA 02142 (US)
- (72) Inventors:
  - MORGAN, Jeffrey, R. Brighton, MA 02135 (US)
  - . MULLIGAN, Richard, C. Cambridge, MA 02138 (US)
- (74) Representative: Schüssler, Andrea, Dr. et al Kanzlei Huber & Schüssler **Truderinger Strasse 246** 81825 München (DE)
- (56) References cited: WO-A-/05345 US-A- 4 016 036

WO-A- 0/07136

- . Molecular and Cellular Biology, vol. 5, no. 1, January 1985, American Society for Microbiology (US) N.E. Hynes et al. "New acceptor cell for transfected genomic DNA: oncogene transfer into a mouse mammary epithelial cell line", pages 268-272, see the abstract
- Cell, vol. 33, no. 2, June 1983 M.G. Roth et al.; "Influenza virus hemagglutinin expression is polarized in cells infected with recombinant SV40 viruses carrying cloned hemagglutinin DNA\*, pages 435-443, see the abstract

Proceedings of the National Academy of Sciences USA, vol. 81, October 1984 R:D: Cone et al.: "High-efficciency gene transfer into mammalian cells: generation of helper-free recombinant retrovirus with broad mammalian host range", pages 6349-6353, see figure 2